

NATIONAL WEATHER SERVICE INSTRUCTION 30-2112
April 19, 2005

Maintenance, Logistics, and Facilities
Systems/Equipment Maintenance, NWSPD 30-21

REPORTING SYSTEMS, EQUIPMENT, AND COMMUNICATION OUTAGES

NOTICE: This publication is available at: <http://www.nws.noaa.gov/directives/>.

OPR: W/OPS1 (M. Paese)

Certified by: W/OPS (J. McNulty, Jr.)

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SUMMARY OF REVISIONS: This directive supersedes NWSI 30-2112, “Reporting Systems, Equipment, and Communication Outages,” dated September 19, 2003. This chapter is revised to show the new URL for the UnScheduled Outage System (USOS), describe USOS logon, add Deep-ocean Assessment and Reporting of Tsunami (DART) buoys, and make some grammatical changes.

Signed by
John McNulty, Jr.
Director, Office of Operational
Systems

April 5, 2005
Date

Reporting Systems, Equipment, and Communication Outages

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1. Introduction. The purpose of this instruction is to ensure senior level managers are made aware of system, equipment, and communication outages that threaten or could threaten public safety or are otherwise specified in Section 3 of this instruction.

2. Responsibilities.

2.1 Assistant Administrator for Weather Services.The Assistant Administrator designates the Director of the Maintenance, Logistics, and Acquisition Division as the focal point for outages.

2.2 Regional Directors, Director of the National Centers for Environmental Prediction (NCEP), and Director of the Office of Operational Systems (OPS). Each director establishes written procedures specifying points of contact (POC) for outages requiring immediate reporting.

2.3 Directors of NCEP Central Operations, Hydrometeorological Prediction Center (HPC), Aviation Weather Center (AWC), Storm Prediction Center (SPC), Marine Prediction Center (MPC), Tropical Prediction Center (TPC), and Chief of the Telecommunication Operations Center. Each business day, the directors of NCEP Central Operations, HPC, AWC, SPC, MPC,

TPC, and the Chief of the Telecommunication Operations Center will provide a report to their director on all computer systems and communications outages specified in Section 3.

2.4 Director of National Data Buoy Center (NDBC). The Director of NDBC will provide a report to the Director of OPS only when the status of an existing outage changes or a new outage occurs.

2.5 Director of the Maintenance, Logistics, and Acquisition Division, OPS. The Director of the Acquisition, Maintenance, and Logistics Division will prepare a consolidated daily report and submit it to the Assistant Administrator for Weather Services and the Deputy Assistant Administrator for Weather Services each business day.

2.6 Regional Systems Operations Division Chiefs. Each business day, the regional systems operations division directors will provide a report to the regional director on all outages specified in Section 3.

2.7 Senior Individual on Duty. If public safety is or could be affected by system, equipment, or communication failure, the senior individual on duty at Weather Forecast Offices (WFO), Weather Service Offices, River Forecast Centers (RFC), Data Collection Offices, Center Weather Service Units, West Coast/Alaska Tsunami Warning Center, Pacific Tsunami Warning Center, NCEP Central Operations, HPC, AWC, SPC, MPC, TPC, National Weather Service Telecommunication Gateway (NWSTG), and NDBC site reports immediately by telephone (voice contact) or pager to a designated POC.

2.8 Point of Contact. When a POC is notified of a system outage or failure that threatens or could threaten public safety, the POC notifies the regional director, Director of NCEP, or Director of OPS.

3. Reporting Requirements for Systems, Equipment, and Communications Outages.

3.1 During weather or hydrologic conditions that threaten or could threaten public safety, report immediately (see paragraph 4.1) failure of:

1. Advanced Weather Interactive Processing System (AWIPS) requiring implementation of service backup
2. Weather Service Radar-88 Doppler (WSR-88D), NOAA Weather Radio, WFO/RFC voice communications, Frame Relay Circuit, or associated equipment.
3. Report all outages if failure is described in paragraph 4.2 and Appendix C. Report immediately when backup or restoration steps fail.

4. Reports.

There are two types of reports, Incident and Daily.

4.1 Incident Reports. Send an incident report immediately when failure of equipment or systems threaten or could threaten public safety. During normal business hours (Eastern time), the director notifies the Assistant Administrator for Weather Services and the Deputy Assistant Administrator for Weather Services of outages with mission impact, public visibility, or political sensitivity warrant such notification. Otherwise such notification to the Assistant Administrator and Deputy Assistant Administrator will take place at the beginning of the next business day by voice contact or the highest priority level e-mail. Sites and centers will follow-up incident reports with an e-mail or other written documentation covering items listed in Appendix A. Incident reports will be documented and tracked in the daily report described in Section 4.2. This documentation will address the items listed in Appendix A. When outages are restored, the time of restoration will be reported. All times given in reports will be UTC.

4.2 Daily Reports. Send daily reports when failure of equipment or systems exceeds or is expected to exceed the established restoration times (see Appendix C), or if criteria exists for an Incident Report using the Unscheduled Outage System (USOS). For outages specified in Section 3 but not requiring incident reports, the senior individual on duty at the site will contact designated regional, NCEP, or OPS officials by e-mail or telephone (voice or answering machine). These outages also will be recorded and tracked in the daily report. Directors will provide daily reports to the Director of the Maintenance, Logistics, and Acquisition Division, OPS by 11:30 AM Eastern time each business day. (Note: Alaska and Pacific Regions will provide reports as of their COB the previous business day.) The Daily Report consists of two sections: (1) Current outages and (2) Outages closed since the last report by region/center (see Appendix B). Within each part, the report will be organized by system (e.g., AWIPS, WSR-88D, ASOS, mainframe computer, FTP server). Within each system category, sites will be listed from longest to shortest outage. For each outage, the hours of outage to date and projected date and time of restoration will be listed separately along with the cause of the outage. For current outages, the projected total outage hours will be used in listing the sites from the longest to shortest outage. The cause of each outage, the actions being taken to restore the outage, the effect on services, and any severe weather that took place during the outage will be listed. The second part of the report, outages closed since the last report, will list the total hours of the outage and the date and time the outage was closed. In both parts of the report, outages that required incident reports will be distinguished by appearing in bold print. The report format for the daily report is available at <http://ops13web.nws.noaa.gov/usos>. All times given in reports will be UTC.

Note: Even though the NWS standard Mail Client is Netscape Mail, Netscape is not the NWS standard browser. Use Internet Explorer 5 or 6 for the USOS because many of the features used in the USOS do not function with the Netscape browser (due to Netscape limitations). Adobe Acrobat Reader 4.0 or higher must be used for the USOS reports. If neither of these software components is installed, links are provided on the USOS screen. If your Internet Explorer browser was installed or upgraded since installing Acrobat Reader, reinstall Acrobat to have it work properly.

APPENDIX A - Incident Report

All **Incident Reports** follow-up e-mails should cover the following:

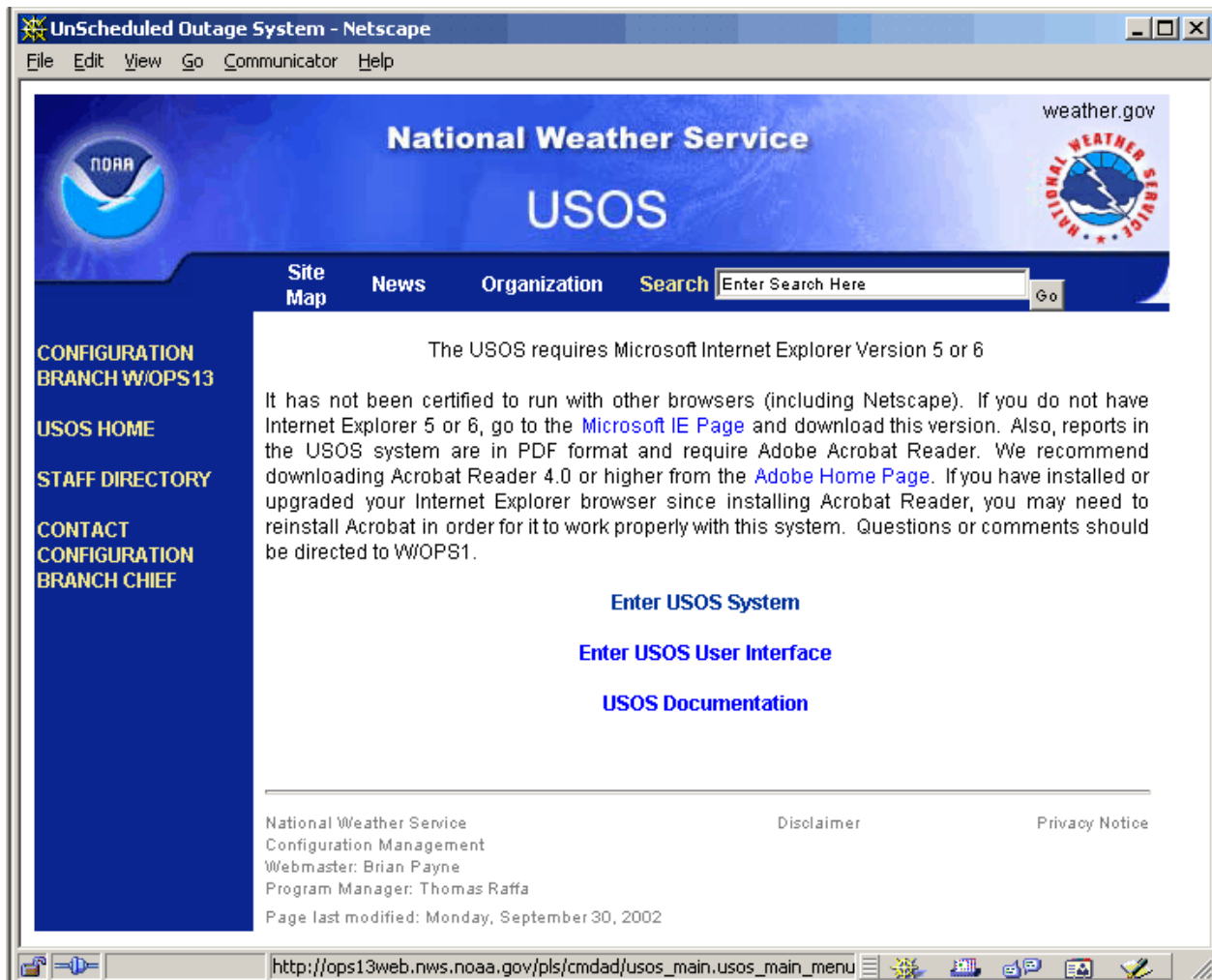
1. System, equipment, or communication capability that is out.
2. Site and responsible WFO/RFC.
3. Date/time outage began.
4. Projected restoration date and time.
5. Actions being taken to restore system, equipment, or communications capability.
6. Effect on services.
7. Severe weather conditions occurring during outage.

(Note: all times should be given in UTC.)

APPENDIX B - UnScheduled Outage System (USOS) Reporting

The USOS provides a Web based data entry system to enter new outages, revise previously submitted open outages, close previously submitted outages, and generate reports. The data entry is developed using the Oracle DBMS, Oracle Application Server, and JavaScript. The reports are available for viewing on a personal computer or printing in hard copy format.

1. Open Internet Explorer.
2. Enter the address, <http://ops13web.nws.noaa.gov/usos>, to access the USOS.
3. Press Enter. The National Weather Service USOS screen displays.



4. Click **Enter USOS System** to begin using the USOS System. The Login screen displays for entering your e-mail username and password. For example, if your e-mail address is “john.doe@noaa.gov,” your username is “john.doe” and your password is the same password you use to log into your e-mail account.

Enter Logon Information - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Application Login Page for W/OPS13 Applications and MIRS E-Forms

Please type your username and password

User Name:

Password:

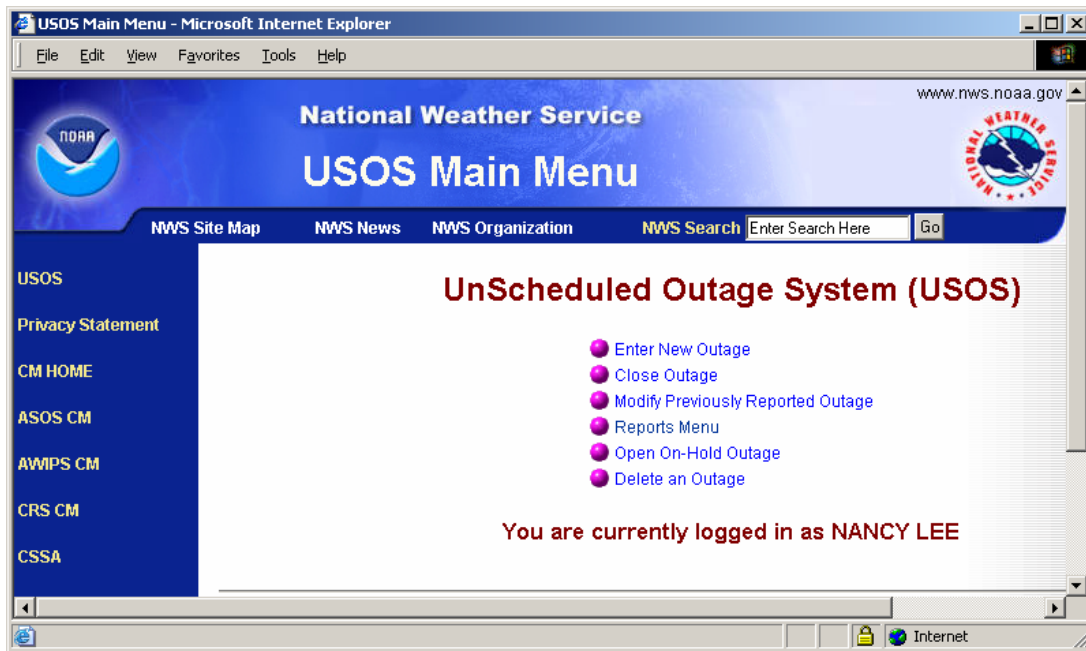
Login Cancel

Beginning Monday, July 12, 2004, all users with a noaa.gov email address will use their email username (which is your email address minus the '@noaa.gov' suffix) and password to access OPS13 systems. If you do not have a noaa.gov email account, use the username and password assigned to you. To request a username and password, click [here](#)

Done Internet

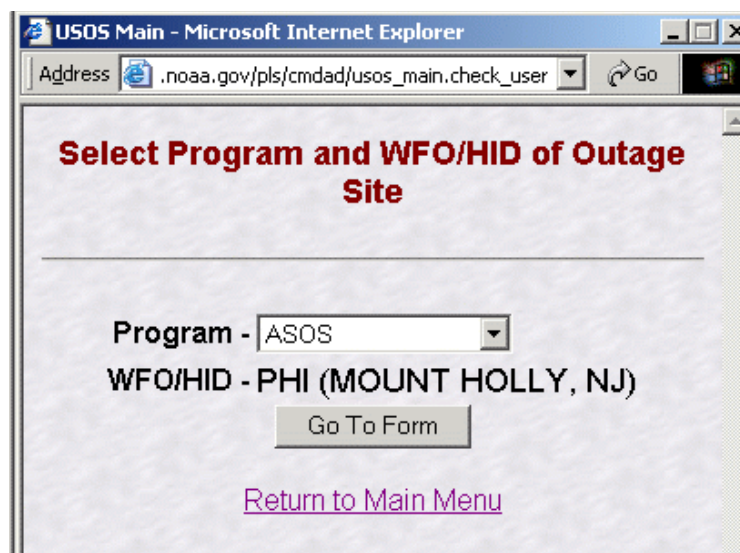
Note: To access the USOS system, you must have a valid “noaa.gov” e-mail address. In addition to having a valid “noaa.gov” e-mail address, you must also be granted access to the USOS system. If you require USOS access, please contact your Regional Electronics Program Manager or SIB Chief.

5. Enter the USOS account User Name and Password, and click the **OK** button. The USOS main menu displays.



1. Enter New Outage. This menu option provides a way to enter a new Unscheduled Outage Record to submit for Region approval. There are two components to entering a new outage: the "Select Program" menu and the "Enter New Outage" data entry form.

1. Click **Enter New Outage**. The Select Program menu displays. This menu is standard for every site and contains a list of Program options for the Daily Report. A drop down list of all available programs appears by clicking the down arrow at the end of the Program box.



2. Select a Program, and click the **Go To Form** button to bring up the New Outage Daily Entry form. This form is used to enter information about a new outage and submit this information to Region for approval. A document number will be automatically generated for each new form. The Program field is automatically filled-in from the Select Program menu. The WFO field is generated based upon the Oracle login account.

Document Number Check - Microsoft Internet Explorer

Address: http://ops13web.nws.noaa.gov/pls/cmdad/usos_info.info_scn?v_mode=new&v_program=ASOS&v_wfo=PHI

**UNSCHEDULED OUTAGE SYSTEM (USOS)
SYSTEM OUTAGE REPORT**

Document Number PHI305124634	Program ASOS	Outage Site ACY (ATLANTIC CITY, NJ)	WFO PHI (MOUNT HOLLY, NJ)
--	------------------------	---	-------------------------------------

Open Date & Time in UTC (MM/DD/YYYY HH:M)	Projected Close Date & Time in UTC (MM/DD/YYYY HH:M)	Projected Outage Hours (HH:MM:SS)
05/09/2003 23:30	05/13/2003 12:00	84:30

☐ Check this box if an incident report was created.

Cause of Outage (maximum 240 characters) 228 characters left
TEMP/DEW OUT

Action Taken to Restore (maximum 240 characters) 227 characters left
ORDERED PARTS

Impact on Services (maximum 240 characters) 218 characters left
OBSERVER HAS TO SLING.

Severe Weather Conditions (maximum 240 characters) 236 characters left
NONE

Save Document on Hold Submit To Region Quit (without Saving)

If the Program field is located in the EMRS database, a drop down box is generated showing the valid Site Ids (SID) in the Outage Site box, otherwise, a free form text field displays in this box.

Note: To add, change, or delete data in the SID pick list, contact the EMRS Program Manager within the Configuration Branch (W/OPS13). Once the information is changed within the EMRS database, it displays in the USOS.

The Projected Outage hours are calculated after entering an Open Date & Time and Projected Close Date & Time. The Projected Close Date & Time is calculated after entering an Open Date & Time and Projected Outage Hours.

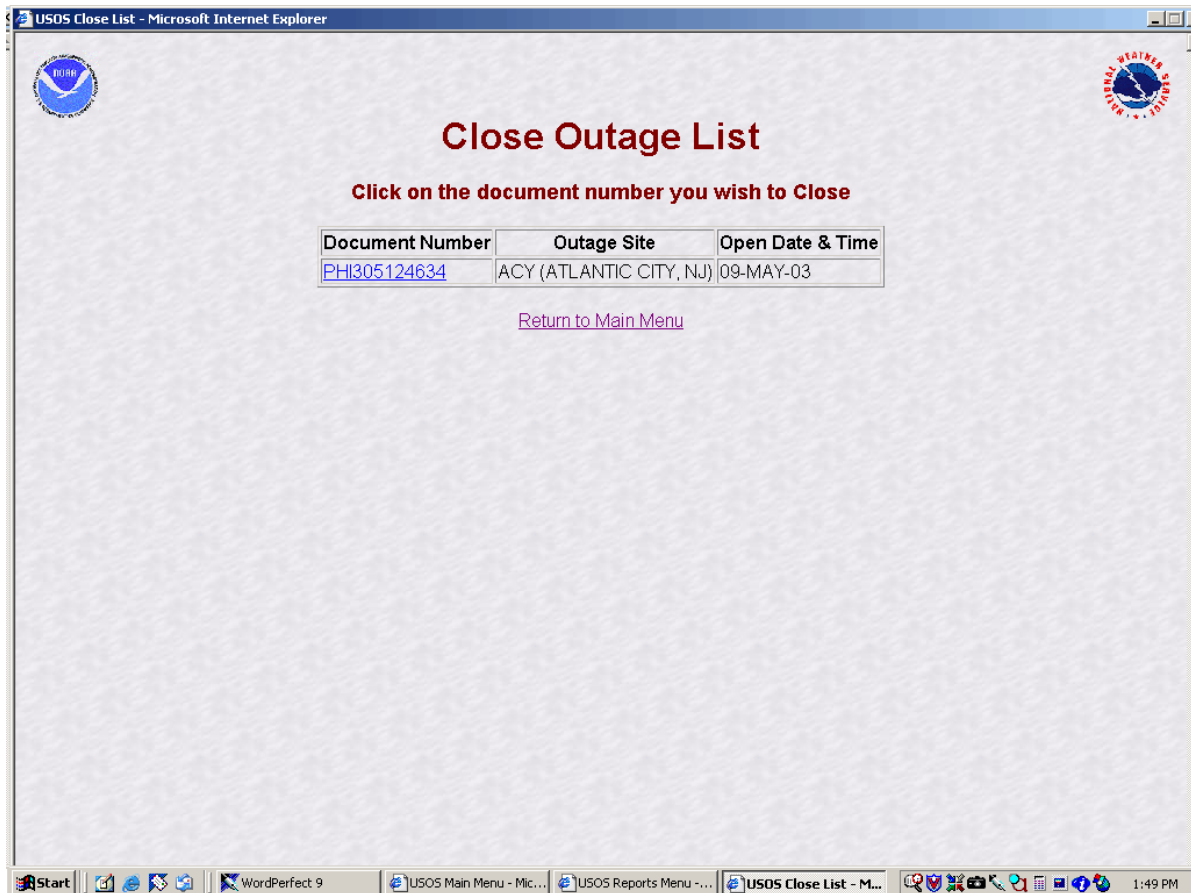
There are counters to the right of the text fields on the form indicating how many characters are left.

At the bottom of the form, there are three buttons:

- Save Document on Hold
- Submit To Region
- Quit (without saving)

2. Close Outage. This menu option provides a way to close an outage previously listed on a Daily Outage Report. There are two components to the Close Outage option: the Close Outage Record List and the Close Outage Data entry form.

1. Select **Close Outage**. The Close Outage List screen displays. This list shows all the records eligible for closure.



2. Select the Document Number link for an outage to complete the close information. The close outage data entry form displays. There are two buttons on the bottom of the form:

- Close an Outage
- Quit (without Saving)

**UNSCHEDULED OUTAGE SYSTEM (USOS)
SYSTEM OUTAGE REPORT**

Document Number PHI305124634	Program ASOS	Outage Site ACY (ATLANTIC CITY, NJ)
Open Date & Time in UTC (MM/DD/YYYY HH:MM) 05/09/2003 23:30	Projected Close Date & Time in UTC (MM/DD/YYYY HH:MM) 05/13/2003 12:00	Projected Outage Hours (HH:MM) 84:30

No Incident Report was created for this outage.

Cause of Outage (maximum 240 characters) 228 characters left
TEMP/DEW OUT

Action Taken to Restore (maximum 240 characters) 227 characters left
ORDERED PARTS

Impact on Services (maximum 1024 characters)
OBSERVER HAS TO SLING.

Severe Weather Conditions (maximum 1024 characters)
NONE

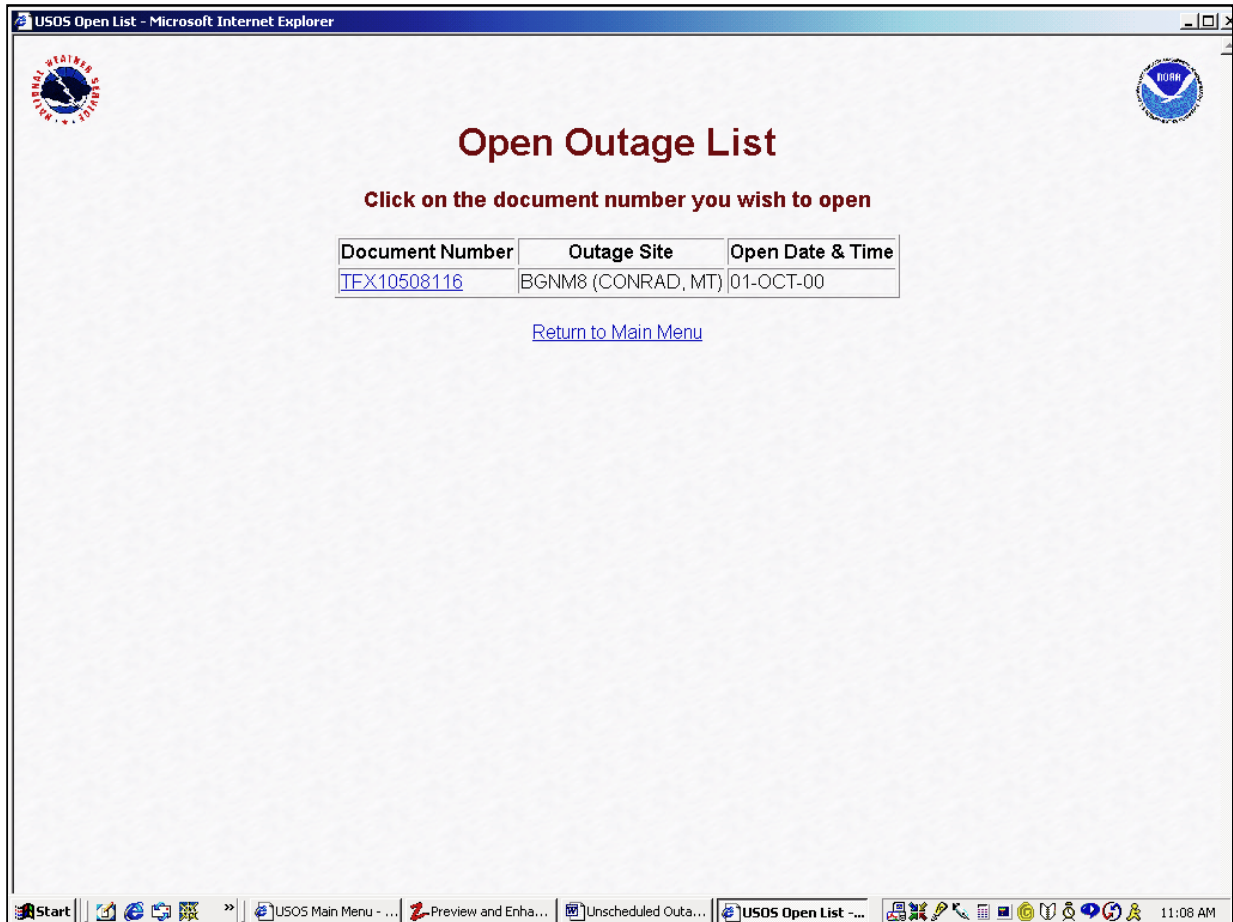
Close Date & Time in UTC (MM/DD/YYYY HH:MM) 05/12/2003 16:00	Actual Outage Hours
--	--------------------------------

Close Outage Quit (without Saving)

3. Enter the Close Date and Time in UTC (MM/DD/YYYY^Y HH:MI).

3. Modify Previously Reported Outage. This menu option provides a way to modify previously submitted information to an open outage listed on a Daily Outage Report.

1. Click **Modify Previously Reported Outage.** The Open Outage List displays. This list shows all the open outage records eligible for revision.



2. Select the Document Number link for a record to modify information for an open outage. The modify open outage data entry form displays. This form is used to revise previously submitted information for an open outage. There are two buttons on the bottom of the form:

- Submit to Region
- Quit (without Saving)

**UNSCHEDULED OUTAGE SYSTEM (USOS)
SYSTEM OUTAGE REPORT**

Document Number TFX10508116	Program NWR	Outage Site BGNM8 (CONRAD, MT)	WFO TFX (GREAT FALLS, MT)
---------------------------------------	-----------------------	--	-------------------------------------

Open Date & Time in UTC (MM/DD/YYYY HH:MM)	<input checked="" type="checkbox"/> Check this box if the projected restore time is unknown.	Projected Close Date & Time in UTC (MM/DD/YYYY HH:MM)	Projected Outage Hours (HH:MM:SS)
10/01/2000 12:00			

☐ Check this box if an incident report was created.

Cause of Outage (maximum 240 characters) 240 characters left

Action Taken to Restore (maximum 240 characters) 240 characters left

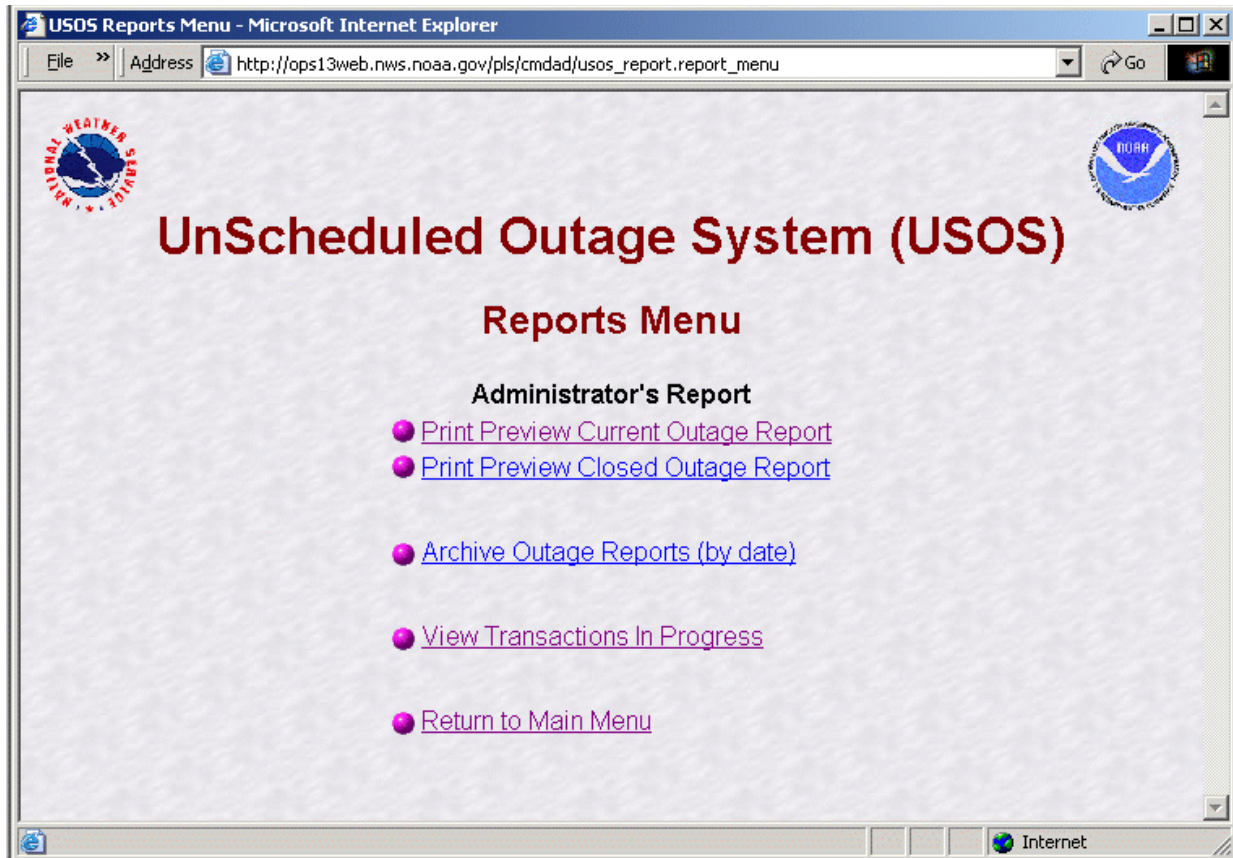
Impact on Services (maximum 240 characters) 240 characters left

Severe Weather Conditions (maximum 240 characters) 240 characters left

Reason for Revision (maximum 240 characters) 240 characters left

4. Reports Menu. The Reports Menu option provides a way to print daily outage reports using Adobe Acrobat. If installed properly, the Adobe Acrobat Reader launches when a report is selected. There are four choices on the Reports Menu:

- Print Preview Current Outage Report (to see a draft open outage report for today)
- Print Preview Closed Outage Report (to see a draft close outage report for today)
- Archive Outage Reports (to see official reports submitted to the NWS Administrator)
- View Transactions in Progress (to see the status of submitted outage records)



4.1 Archive Outage Reports Selection Screen

1. Select the **Archive Outage Reports Selection Screen**. The Archive Reports selection screen displays. This screen provides a mechanism for selecting a date for an official Open Outage Daily Report or Closed Outage Daily report.

USOS Archive Reports - Microsoft Internet Explorer

Address http://ops13web.nws.noaa.gov/pls/cmdad/usos_report.archive_reports?v_scope=site&v_site=USOSPHI Go

UnScheduled Outage System (USOS)

Archive Reports

Please select a Report Date from the desired drop-down list and click View Report

Open Outage Reports	Closed Outage Reports
05/09/2003 13:48	05/09/2003 13:48
<input type="button" value="View Report"/>	<input type="button" value="View Report"/>

***There are records on this day's report for your office**

[Return to Reports Menu](#)

2. Click the arrow to the right of the date box to select a report for a day.

3. Click the View Report button to launch Adobe Acrobat to see the report. The Acrobat Reader has several built-in functions allowing users to print a report, save a report to disk, zoom in on a report, advance to the next page, advance to the last page, etc. To activate these features, click on the Adobe Acrobat hot keys located on the tool bar below the URL. There is an Adobe Acrobat logo located on the Adobe Acrobat tool bar.

Note: You should not use the toolbar above the URL to print the report. This toolbar pertains to Internet Explorer, and not Adobe Acrobat.

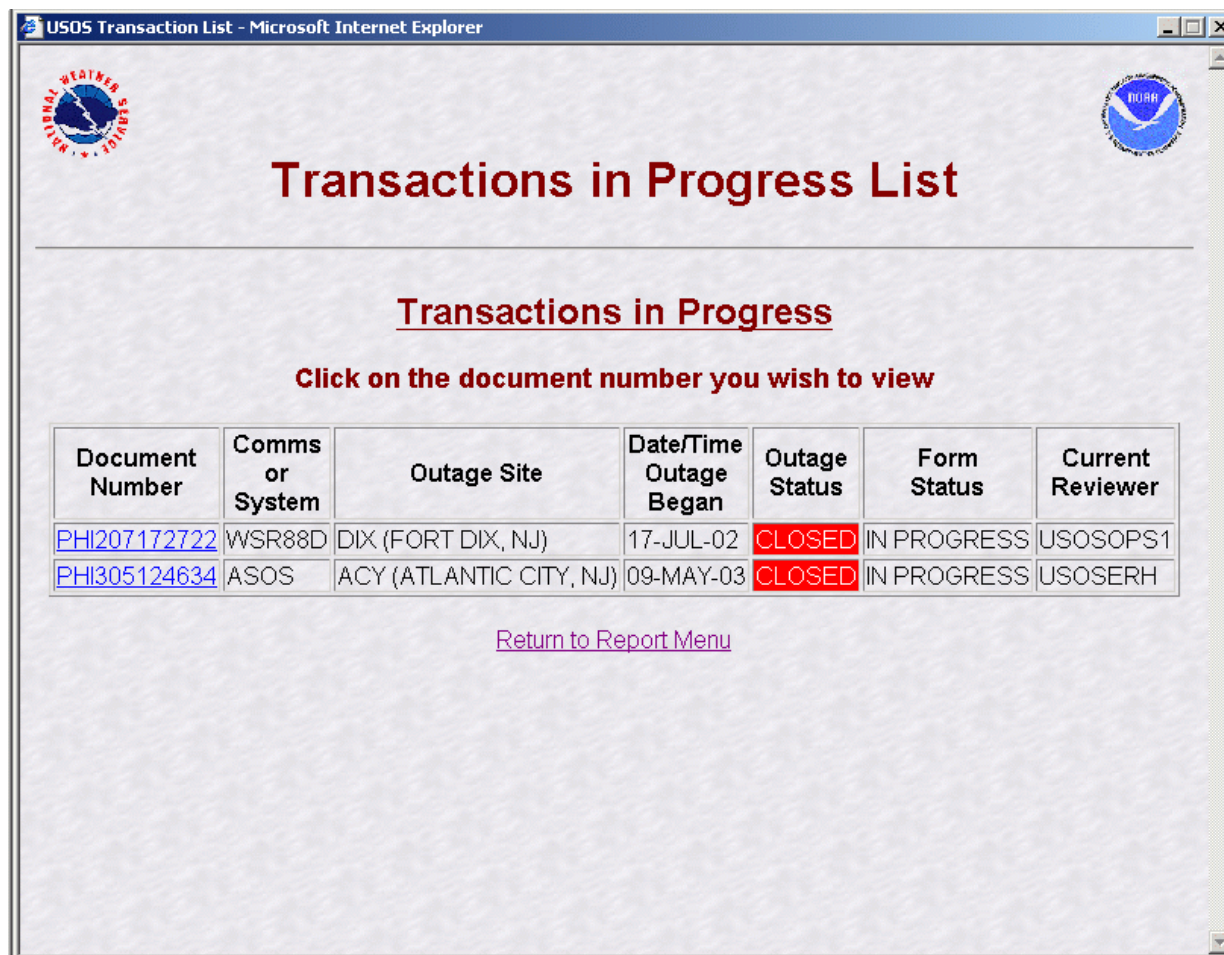
The screenshot shows a web browser window with the address bar displaying a URL from NOAA. The main content area shows a report titled "UnScheduled Outage System (USOS) Daily Outage Report" for "WFO PHILADELPHIA, PA". The report is marked as a "DRAFT" and shows "Outages Closed Since Last Report" with a "Report Date: 05/12/2003". A table lists the outage details:

Comms or System	Outage Site	WFO	Date/Time Outage Began	Date and Time of Restore	Actual Outage Hours	Cause	Actions Being Taken to Restore	Effect on Services	Severe Wx Conditions	Outage Number
ASUS	ACY (ATLANTIC CITY, NJ)	PHI (MOUNT HOLLY, NJ)	05/09/2003 23:30	05/12/2003 16:00	64:30	TEMP DEW OUT	ORDERED PARTS	OBSERVER HAS TO SLING	NONE	PHI305124634

Below the table, it states "Total Outages for This Region 1". The browser's status bar at the bottom shows "Done" and "Internet".

4.2 View Transactions In Progress

1. Select **View Transactions in Progress**. The Transactions In Progress List displays a list of all outages submitted for the site currently in review.



Transactions in Progress List

Transactions in Progress

Click on the document number you wish to view

Document Number	Comms or System	Outage Site	Date/Time Outage Began	Outage Status	Form Status	Current Reviewer
PHI207172722	WSR88D	DIX (FORT DIX, NJ)	17-JUL-02	CLOSED	IN PROGRESS	USOSOPS1
PHI305124634	ASOS	ACY (ATLANTIC CITY, NJ)	09-MAY-03	CLOSED	IN PROGRESS	USOSERH


[Return to Report Menu](#)

2. Click the Document Number link to view detailed information for an outage.

5. Open On-Hold Outage. This menu option provides a way to modify an outage previously put on hold and not yet submitted to a Region for approval. There are two components to the Open On-Hold Outage option: the Document Hold List and the on-hold outage record data entry form.

1. Click **Open On-Hold Outage.** The Document Hold List displays. This list shows all the records placed on-hold in the past and not yet submitted to Region for approval.

USOS Hold List - Microsoft Internet Explorer



Document Hold List

Click on the document number you wish to open

Document Number	Outage Site	Open Date & Time
TFX1042565	TFX (GREAT FALLS, MT)	25-APR-01
TFX1042573	GTF (GREAT FALLS, MT)	25-APR-01

[Return to Main Menu](#)

Taskbar: » | [Unscheduled Outa...] | [USOS Main Menu - ...] | [USOS Hold List - ...] | [Preview and Enha...] | [System Icons] | 3:15 PM

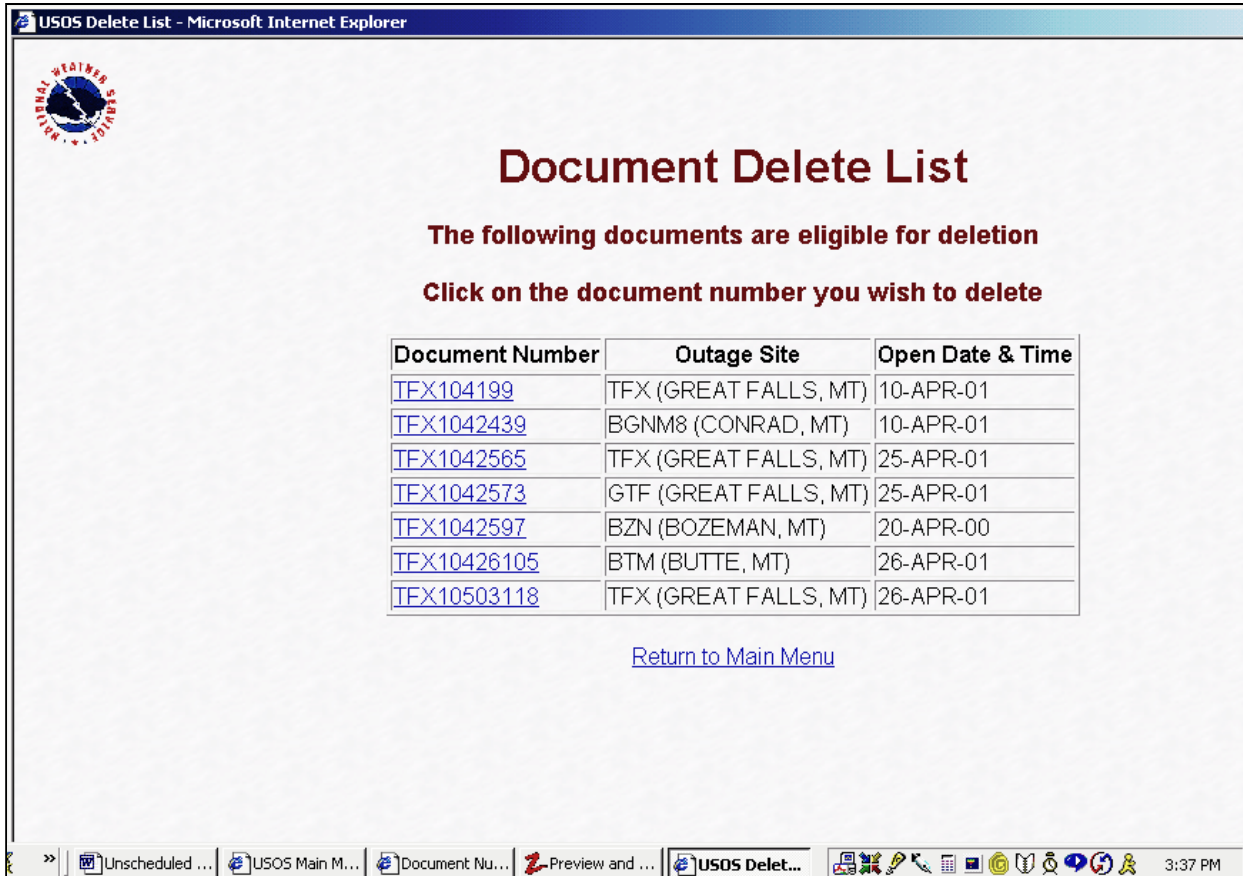
2. Select the Document Number link for an outage to complete the information for an on-hold outage record. The on-hold outage data entry form displays. This form is used to update outage information and is identical to the Enter New Outage Data Entry form. Three buttons are on the bottom of the form:
 - Save Document on Hold
 - Submit to Region
 - Quit (without Saving)

**UNSCHEDULED OUTAGE SYSTEM (USOS)
SYSTEM OUTAGE REPORT**

Document Number TFX1042565	Program AWIPS	Outage Site TFX (GREAT FALLS, MT) ▼	WFO TFX (GREAT FALLS, MT)
Open Date & Time (MM/DD/YYYY HH:MM) 04/25/2001 07:22	<input checked="" type="checkbox"/> Check this box if the projected restore time is unknown.		Projected Close Date & Time (MM/DD/YYYY HH:MM) <div></div>
Projected Outage Hours (H-HH:MM) <div></div>			
<input type="checkbox"/> Check this box if an incident report was created.			
Cause of Outage (maximum 240 characters)		226 characters left	
SYSTEM LOCK-UP			
Action Taken to Restore (maximum 240 characters)		230 characters left	
CALLED NCF			
Impact on Services (maximum 240 characters)		212 characters left	
HAD TO GO TO BACKUP SERVICES			
Severe Weather Conditions (maximum 240 characters)		236 characters left	
NONE			
Save Document on Hold		Submit To Region	
		Quit (without Saving)	

6. Delete an Outage. This menu option provides a way to remove an outage not yet approved by Region. There are two components to the Delete an Outage option: Document Delete List and delete outage record data entry form.

1. Click **Delete an Outage.** The Document Delete List displays. This list shows all the records eligible for deletion.



Document Delete List

The following documents are eligible for deletion

Click on the document number you wish to delete

Document Number	Outage Site	Open Date & Time
TFX104199	TFX (GREAT FALLS, MT)	10-APR-01
TFX1042439	BGNM8 (CONRAD, MT)	10-APR-01
TFX1042565	TFX (GREAT FALLS, MT)	25-APR-01
TFX1042573	GTF (GREAT FALLS, MT)	25-APR-01
TFX1042597	BZN (BOZEMAN, MT)	20-APR-00
TFX10426105	BTM (BUTTE, MT)	26-APR-01
TFX10503118	TFX (GREAT FALLS, MT)	26-APR-01

[Return to Main Menu](#)

2. Select the Document Number link for an outage to delete an outage record.

The Delete Outage Data Entry form displays. This form is used to review a non-regional approved record for removal from the USOS. There are two buttons:

- Delete Outage
- Quit (without Saving)

Document Number Check - Microsoft Internet Explorer

**UNSCHEDULED OUTAGE SYSTEM (USOS)
SYSTEM OUTAGE REPORT**

<i>Document Number</i> TFX1042565	<i>Program</i> AWIPS	<i>Outage Site</i> TFX (GREAT FALLS, MT)
<i>Open Date & Time (MM/DD/YYYY HH:MM)</i> 04/25/2001 07:22	<i>Projected Close Date & Time (MM/DD/YYYY HH:MM)</i>	<i>Projected Outage Hours (HH:MM)</i>
No Incident Report was created for this outage.		
<i>Cause of Outage (maximum 1024 characters)</i> SYSTEM LOCK-UP		
<i>Action Taken to Restore (maximum 1024 characters)</i> CALLED NCF		
<i>Impact on Services (maximum 1024 characters)</i> HAD TO GO TO BACKUP SERVICES		
<i>Severe Weather Conditions (maximum 1024 characters)</i> NONE		
<i>Close Date & Time</i>		<i>Actual Outage Hours</i>
Delete Outage		Quit (without Saving)

» | Preview and Enhance - C... | USOS Main Menu - Micros... | Document Number Ch... | 3:41 PM

7. Technical Assistance. If technical difficulties occur when operating the USOS system, contact the USOS Development Group within the Configuration Branch at National Weather Service Headquarters at:

National Weather Service
Configuration Branch W/OPS13
1325 East West Highway, Room 16392
Silver Spring, MD 20910-3283

301-713-1892 x152

APPENDIX C - System Outages to be Reported in Daily Reports

The following system outages are required to be reported in Daily Reports each business day:

1. Failures requiring immediate reporting (Incident Reports), highlighted in bold letters (See Appendix A).
2. Failure of AWIPS that requires implementation of full or partial service backup as described in NWSI 10-2201 (if all services are handled locally, reporting is not required).
3. Failure of NWS WSR-88D expected to last more than 12 hours.
4. Failure of NOAA Weather Radio expected to last more than 12 hours.
5. Failure of WFO or RFC voice communications expected to last more than 12 hours.
6. Failure of regional frame relay circuit or associated equipment expected to last more than 12 hours.
7. Failure of upper air equipment expected to last more than 24 hours.
8. Failure of ASOS that is not expected to be restored within established restoration time. See NWSI 30-2111, Appendix B, ASOS Maintenance.
9. Total failure of Data Buoys, and Coastal Marine Automated Network (C-MAN) stations.
10. NCEP Central Operations and missing individual model runs if an outage is projected to last longer than one forecast cycle.
11. Failure of mission-critical computer systems and communication capabilities at HPC, AWC, SPC, MPC, TPC, or the NWSTG (including the AWIPS Satellite Broadcast Network) for which on-site backup cannot be invoked and standard operating procedures fail to restore service.